

NOTES ON TWO SPECIES OF THE DREPANIDAE FROM JAPAN

By HIROSHI INOUE

In writing this paper I am much indebted for valuable advices rendered by Mr. ALLAN WATSON, British Museum (Natural History), and for permitting me free access to the late Dr. MATSUMURA's type specimens by Prof. Dr. TOICHI UCHIDA, Hokkaido University. My hearty thanks are also due to the following friends for their kind helps in specimens: Miss ISOKO HATTORI, National Institute for Agricultural Sciences, Dr. TAMOTSU ISHIHARA, Ehime University, Mr. HIROSHI KUROKO, Hiko-san Biological Laboratory, Kyushu University, Mr. YOSHIHIKO KUROSAWA, National Science Museum, Tokyo, Mr. MASARO OKANO, Iwate University, Mr. YŪZO KAWAKAMI, and Mr. SHIGEHISA NAKAMURA.

Callidrepana hirayamai NAGANO, 1918.

Callidrepana (?) *hirayamai* NAGANO, 1918, Ins. World, 22: 358, pl.12, f.7(♂).

Callidrepana discipunctata, subsp. NOMURA, 1937, Rep. Bult. Fak. Terk. Kjusu Imp. Univ., 7 (4): 450, f. 13(♂) (nec WARREN).

Callidrepana yakushimalis YAMAMOTO, 1960, Tinea, 5 (2): 334, f.1-3 (**syn. nov.**).

The original description given by NAGANO in Japanese will be translated as follows:

"Adult. ♂, head yellowish brown, antenna and palpus concolorous with it. Thorax yellowish brown, a little mixed with black, thorax below yellowish white, legs yellowish brown, fore tibia and tarsus and median and hind tarsus more or less tinged with dark brown. Abdomen also yellowish brown, beneath a little paler. Forewing pale yellow, more or less tinged with dark brown, scattered with silvery scales, costa yellowish brown, apical area purple-brown, dark antemedian line running obliquely from cell to vein 1, but not conspicuous, there is an oblique dash inside discocellulars, reaching upper and lower margins of cell, outside it there

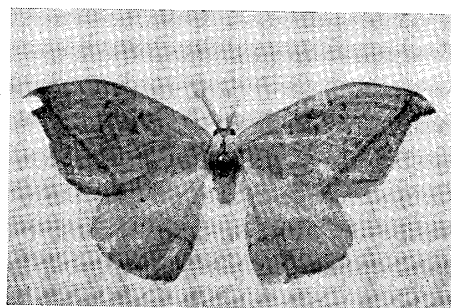


Fig. 1 *Callidrepana hirayamai*
NAGANO ♂ (Tashiro-mura,
Kimotsuki-gun, Kagoshima Pref.)

are six dark dots between veins 3 and 7, more or less scattered with silvery scales around those marks, yellowish brown postmedian line running straight from costa near apex to hindmargin, accompanied proximally with a dark brown line, subterminal line dark, serrate but inconspicuous, terminal line silvery, fringes concolorous with wing, but darker brown towards apex. Hindwing yellow, posterior half dark brown, postmedian line similar to forewing not reaching anterior half, subterminal and terminal lines also nearly identical with forewing, but they are vanished at anterior half, fringes yellowish brown, mixed with dark brown. Under surface yellow, more or less tinged with dark brown, forewing with costal area yellowish brown, both wings with a row of postmedian dark dots. Length of body 12mm, expanse of wing 42mm.

"Habitat: Kiso-yama, Shinano, 3. VII. 1915, S HIRAYAMA, leg.

"Appendix. As there is only a single specimen of this species in my hands a detailed study of structures by dissection cannot be done. Hence a decision as to its generic position has to be left for a future study."

In summer 1955 I visited Nawa Entomological Laboratory, Gifu, where I expected that the moths studied by NAGANO including his type specimens were preserved, but unfortunately I could not find out the one in question among the haphazardly looked-after collection. Therefore, I placed this insect in "Systematic position unknown" in Check List, Part 4 : 370, 1956.

Recently, however, I have had a chance to study two males of a large *Callidrepana* species and found that the moths indisputably belong to *C. hirayamai* and that the male from the island of Yakushima erroneously identified by NOMURA as *C. discipunctata*, subsp. is apparently the same species, judging from the fine picture.

While my identification for this species had still been pendulous, Mr. YAMAMOTO's description of *C. yakushimalis* had been contributed to *TINEA*, Vol. 5, No. 2, and when I reached to a definite conclusion, the printing of the *Tinea* had already been too far advanced for me to cancel his MS. Consequently, to my great regret as the editor of *Tinea*, a superfluous synonymy was added to this species.

Specimens examined : Tashiro-mura, Kimotsuki-gun, Kagoshima Pref., 13. V. 1928, 1 ♂ (A. KAWADA); Arita, Kushimoto-machi, Wakayama Pref., 10. II. 1959, 1 ♂ (C. MORISHIMA).

Length of forewing : 23-24mm.

Distribution: Honshu, Kyushu (unrecorded), Yakushima.

The structure of antenna, palpus, legs, wing-shape, venation as well as the colour and markings show it to be a true *Callidrepana*, but the structure of male genitalia is quite distinct from *C. patrana palleolus* (MOTSCHULSKY) found in Japan. Socii thick, expanded towards apex, apex serrate, both arms approximated together surrounding anus, gnathos a slender band, subequal in width throughout, valva rather small, simple, tapered, apex narrow, aedeagus cylindrical, curved near coecum. Eighth abdominal segment with large sclerotized sternum and tergum, each of which with both sides projected.

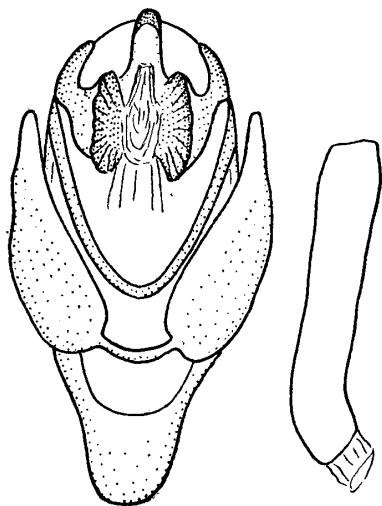


Fig. 2. *Callidrepana hirayamai*
NAGANO, ♂ genitalia.

Oreta purpurea sp. nov.

Oreta extensa NAGANO, 1917, Ins. World, 21:465; NAGANO, 1917, Bull. Nawa Ent. Lab., 2: 129, pl. 3, f. 14; HORI,

1938, Mushi, 11: 100 (nec WALKER).

Oreta extensa ab. *fusco-purpurea* MATSUMURA, 1927, Journ. Coll. Agr. Hokkaido Imp. Univ., 19 (1): 45, pl. 4, f. 7; GAEDE, 1931, Lep. Cat., 49:44.

Psiloreta extensa f. *fuscopurpurea* MATSUMURA, 1931, 6000 Ill. Ins. Jap.: 746, no. 604.

Oreta extensa fuscopurpurea INOUE, 1956, Check List Lep. Jap., 4: 370; KUROKO, 1957, Enum. Ins. Mont. Hikosan, 1: 50, pl. 1, f. 8; KUROKO, 1958, in Icon. Het. Jap. Col. Nat., [2]: 5,

pl. 66, f. 1579; INOUE, 1959, in Icon. Ins. Jap. Cat. Nat. Ed., 1 : 175, pl. 122, f. 16.

Head and forelegs orange or scarlet, thorax and abdomen above pinkish or reddish yellow, collar ashy grey. Both wings yellow, heavily suffused with reddish brown, forewing with basal area defined by vague antemedian fascia yellowish, postmedian yellow fascia starting from yellowish apical mark, broadened posteriorly, apex surrounding yellowish mark suffused with leaden scales, a broad leaden band or mark at near tornus outside postmedian fascia, its distal edge serrate, white midcell dot often indistinct, discocellular and postero-discal dots also white. Hindwing with ante- and postmedian yellowish fascia inconspicuous, deeply sinuous, the latter most strongly projected on M3, the three white dots in general larger than on forewing. Under surface with much weaker dark suffusion, forewing with apex widely yellow, hindwing with postmedian yellow fascia as on above, some dark spots at subterminal area. Length of forewing: ♂, 19-24mm, ♀, 24mm.

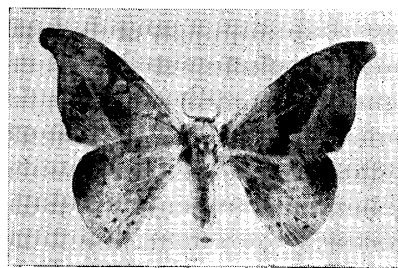
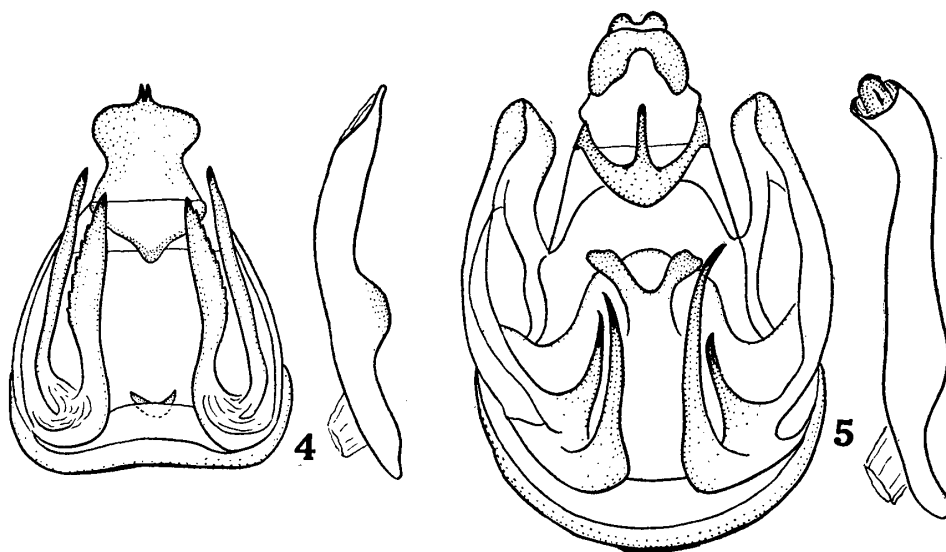


Fig. 3. *Oreta purpurea* INOUE, ♂ (Horisha, Formosa, type of *O. extensa* ab. *fusco-purpurea* MATSUMURA).



♂ genitalia :

Fig. 4. *Oreta extensa* WALKER (Java).

Fig. 5. *Oreta purpurea* INOUE (Japan).

♂ genitalia : uncus roundedly protuberant, with a pair of swellings, gnathos thick, with a sharp central projection, saccus semicircular, not projecting, valva quite complicated, sacculus with a long process, asymmetrical, left one is shorter than the right, aedeagus cylindrical, ventral surface weakly swollen near coecum, caudal tip more or less upcurved. Eighth abdominal sternum much longer than broad, lateral margins hardened, sharply produced.

Holotype (♂) : Mt. Yokokura, Takaoka-gun, Kôchi Pref., 1. VIII. 1959 (Y. KAWAKAMI). Allotype (♀) : Kitanokawa, Hata-gun Kôchi Pref., 9. XI. 1958 (S. NAKAMURA). Paratypes :

Kuki, near Kuroson, 15. VII. 1953, 1♂ (S. HISAMATSU & T. EDASHIGE); Kuroson, 14. VIII. 1955, 1♂ (ISHIHARA, HISAMATSU, WAKE & OKADA); Kitanokawa, Kôchi Pref., 26. V. 1954, 1♂; 7. VII. 1959, 1♂; 14. X. 1957, 1♂; 9. IX. 1958, 1♂; 8~11. XI. 1958, 3♂ (S. NAKAMURA); Mt. Yokokura, Kôchi Pref., 1. VIII. 1959, 1♂; 18. VI. 1960, 1♂ (Y. KAWAKAMI); Hiko-san, Fukuoka Pref., 30. IX. 1953, 1♂; 25. IX. 1959, 1♂; 24. VIII. 1960, 1♂ (H. KUROKO).

The holo-, allo- and 8 paratypes in coll. INOUE, 2 paratypes in coll. Brit. Mus. (Nat. Hist.), 4 paratypes in coll. Hiko-san Biological Lab., and 2 paratypes in coll. Ehime Univ.

Distribution: Shikoku, Kyushu, Okinawa, Formosa.

This species is very distinct from *O. extensa* WALKER from Java, India and Formosa, though it has been treated as a counterpart of the latter. In *extensa* the apex of forewing more strongly produced, the termen below apex more deeply concave, a <-shaped white dash on discocellulars instead of white dots, postmedian line slenderer but more conspicuous than in *purpurea*, without such a large leaden coloured mark at near tornus as in *purpurea*. The structure of the male genitalia is also quite distinct in the shape of uncus, gnathos, valva and aedoeagus as shown in the text-figures. The eighth abdominal sternum is not specialized in *extensa*.

As cited above, MATSUMURA's *fusco-purpurea* was described as an aberrant form of *extensa* and recently it was raised automatically to a subspecies by me without mentioning any reason. Therefore, the priority cannot be given to the name *fusco-purpurea* as a species or subspecies under the present Code of Nomenclature.

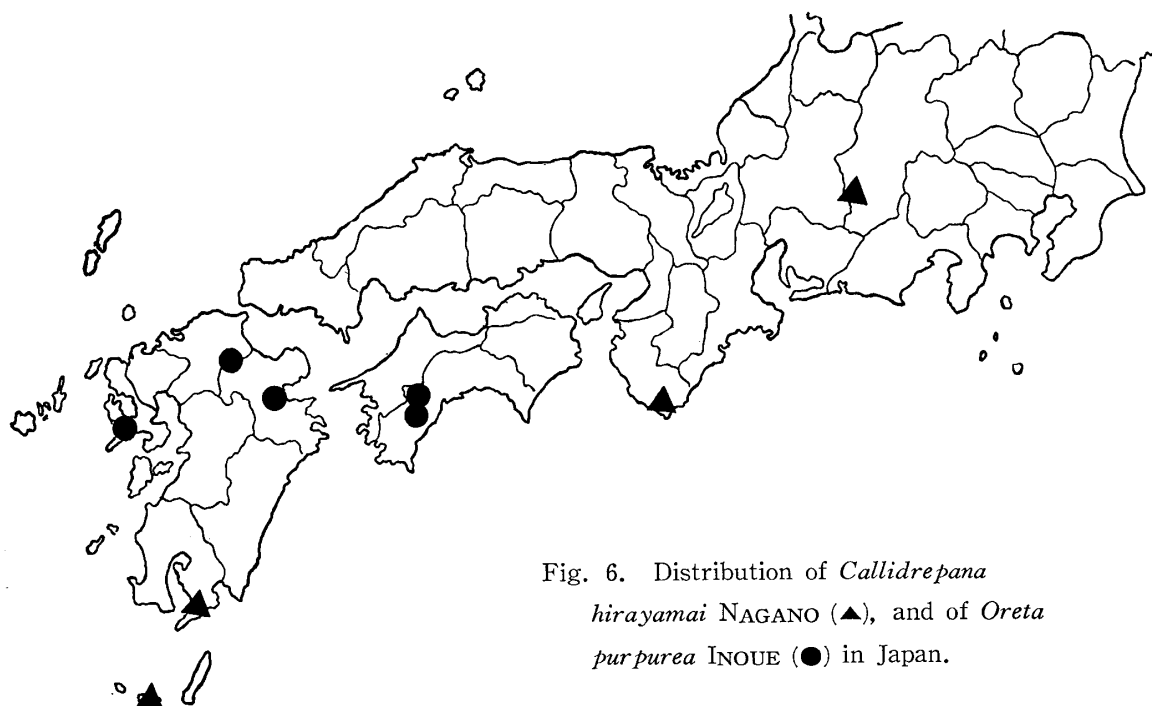


Fig. 6. Distribution of *Callidrepana hirayamai* NAGANO (▲), and of *Oreta purpurea* INOUE (●) in Japan.

摘 要

Callidrepana hirayamai NAGANO ヒラヤマカギバ

このカギバは原記載 (1918, 昆虫世界, 22 : 358, pl. 12, f. 7) で長野県木曾山産の 1 ♂ (1915年 7 月 3 日, 平山修次郎採集) が記録されて以来全然引用されず, 私は名和昆虫研究所で type specimen をさがしたが見付けることができなかった。日本産蝶蛾総目録, 4 : 372, 1956 では「分類上の位置不明」として置いた。1960 年の春からカギバガ科全体の再検討をはじめたところ, 鹿児島県肝属郡田代村産の大型な *Callidrepana* の 1 ♂ (1928年 5 月 13 日河田党採集) を入手したが, これはまぎれもなく野村 (1937, 九大農学部学芸雑誌, 7 : 450, f. 13) が屋久島からニューギニアの *C. discipunctata* の亜種として記録した ♂ (1936年 11 月 15 日) と同じ種だった。しかし *Callidrepana* は東洋熱帯に多くの種が分布し, 私にはとうてい正しい同定ができそうもないので, British Museum の A. E. WATSON 氏に標本を送り比較をお願いしたところ, 恐らく新種であろうとの解答が来た。丁度私の標本が英国へ郵送されている間に, 山本義丸氏から屋久島で採集された新種として *Callidrepana yakushimalis* YAMAMOTO ヤクシマカギバの原稿が *Tinea* に投稿されたので, 私は編集者としてこれを他の原稿と共に印刷所へ送った。更に昨春秋に国立科学博物館に送られて来た和歌山県串本の蛾のなかに体が虫害でなくなった同じカギバの 1 ♂ (1959年 2 月 10 日, 森島千景採集) を見出し, 前に述べた鹿児島の ♂ と共に, *C. hirayamai* の原記載と読みくらべたところ, 疑いもなくこの大型の *Callidrepana*こそヒラヤマカギバであることが判明した。私がこの結論に達したときは, 既に *Tinea*, Vol. 5, No. 2 の印刷が進行してしまい, 山本氏の新種を取り消すことができなくて, 残念ながらそのまま発表されてしまった (1960, *Tinea*, 5 (2) : 334, f. 1—3)。

以上のような経過でヒラヤマカギバは, 屋久島・九州南部及び本州南半の太平洋側に分布していることがわかったので, 今後更に各地から発見されることが期待される。

Oreta purpurata INOUE インドカギバ

このカギバは長野 (1917, 昆虫世界, 21 : 460, 465; 1917, 名和昆虫研究所報告, 2 : 129, pl. 3, f. 14) によって九州から *O. extensa* WALKER インドカギバとして記録された。その松村 (1927, 北大農学部紀要, 19 : 45, pl. 4, f. 7) は台湾産の 1 ♂ に基づいて *O. extensa* ab. *fuscopurpurea* という「異常型」を発表し, これは *Psiloreta extensa* f. *fuscopurpurea* タイワンキオビカギバとして昆虫大図鑑 : 746, 1931 に引用されている。*Oreta* の仲間も *Callidrepana* と同じように東洋熱帯に栄えている属で同定がむずかしいので, WATSON 氏にジャワ産の「真の」*extensa* を借用して日本産とくらべたところ, 四国や九州のインドカギバは外観でも雄交尾器の形でも全然別の種であることがわかった。更に昨春秋に北海道大学農学部で *fuscopurpurea* の type を調べたが, これは日本のインドカギバと同じであった。異常型として発表された学名は種あるいは亜種名としての先取権をもたないので, ここに改めて新種として記載した。最近インドカギバを *O. extensa fuscopurpurea* MATSUMURA という亜種としているのは, 私 (1956, 蝶蛾総目録, 4 : 370) が何も根拠なしに, ab (又は f.) を subsp. に変えたためで, 亜種に昇格させるべき理由は誰も述べていない。なお, 台湾にはインドカギバのほか真の *O. extensa* WALKER も分布している。

インドカギバも暖地の蛾で, 分布図に示した通り, 四国の南半から九州に分布していて, ヒラヤマカギバよりはるかに沢山採集されている。